In the Claims:

Claim 1 (Currently Amended): A communication system, comprising:

a transmitter for generating a signal, the ~~said~~ transmitter having a mapping unit for mapping an input bit stream to a complex number domain, a cyclic convolver ~~converter unit~~ coupled to the mapping unit for generating a partial response signal, wherein the transmitter suppresses a plurality of sub-symbols of the partial response signal to produce a truncated partial response signal in a time domain, and the ~~said~~ transmitter having a prefix unit for appending a cyclic prefix for a leading edge of the truncated partial response signal, the truncated partial response signal to which the cyclic prefix is appended, used to modulate a carrier signal to generate the signal; and

a receiver in communication with the transmitter through a noisy channel for receiving a noisy signal, wherein the receiver recovers the signal from the noisy signal by eliminating noise resulting from transmission through the noisy channel.

Claim 2 (Cancelled)

Claim 3 (Previously Presented): The system of claim 1, further comprising a transform unit for converting the partial response signal to a time domain signal and suppressing the plurality of sub-symbols.

Claim 4 (Previously Presented): The system of claim 1, wherein the receiver comprises a detector unit for recovering the signal from the noisy signal.

Claim 5 (Currently Amended): The system of claim 1, wherein the suppressed plurality of sub-symbols is[[are]] distributed evenly at the edges of the partial response signal.

Claim 6 (Currently Amended): A method for increasing bit-rate through effective bandwidth gain in a system utilizing an orthogonal frequency division multiplexing technique, the method comprising:

selecting a cyclic convolver ~~convoler~~ having predefined values;

applying a signal to the cyclic convolver ~~convoler to a signal having a plurality of sub-symbols~~ to produce a partial response signal having ~~the~~ a plurality of sub-symbols, wherein the values of the cyclic convolver ~~convoler~~ are selected such that a portion of the plurality of sub-symbols of the partial response signal is[[are]] reduced to near zero amplitude;

dropping the portion of the plurality of sub-symbols with near zero amplitude from the partial response signal to produce a truncated partial response signal in a time domain; and

appending a cyclic prefix at a leading edge of the truncated partial response signal.

Claim 7 (Previously Presented): The method of claim 6, further comprising:

transforming the partial response signal using an inverse fast Fourier transformation

technique to produce a time based signal through a noisy ~~signal~~ channel; and

recovering the time based signal from the noisy ~~signal~~ channel at a receiver.

Claim 8 (Currently Amended): A system for delivering information from a source to a destination, the system comprising:

means for ~~converting the information to a frequency domain signal;~~ generating a frequency domain signal having a plurality of sub-symbols having near zero amplitude by performing a cyclic convolution on the information

means for transforming the frequency domain signal to a time domain signal, ~~wherein the means for transforming is coupled to the means for converting and wherein the transformation results in a plurality of sub-symbols having near zero amplitude~~; [[and]]

means for dropping the plurality of sub-symbols having near zero amplitude to produce a truncated time domain signal, wherein the means for dropping is coupled to the means for transforming; and

means for appending a cyclic prefix to a leading edge of the truncated time domain signal.

Claim 9 (Currently Amended): The system of claim 8, further comprising:

means for delivering the truncated time domain signal from the source to the destination, wherein the means for delivering is coupled to the means for dropping; and

means for receiving the delivered truncated time domain signal, wherein the means for receiving is coupled to the means for delivering and wherein the means for receiving comprises:

means for recovering a received truncated time domain signal from the delivered truncated time domain signal, wherein the received truncated time domain signal represents the

truncated time domain signal; and

means for transforming indications of the received truncated time domain signal to a received frequency domain signal, wherein the means for transforming the indications of the received truncated time domain signal is coupled to the means for recovering and wherein the received frequency domain signal represents the frequency domain signal.

Claim 10 (Currently Amended): The system of claim 9, further comprising means for recovering a received information from the received frequency domain signal, wherein the means for recovering is coupled to the means for transforming indications of the received truncated time domain signal and wherein the received information represents the information.

Claim 11 (Currently Amended): An apparatus ~~Apparatus~~ for a transmitter operable to generate a signal for communication upon a noisy channel, the ~~said~~ apparatus comprising:

a mapper ~~mapping unit~~ for mapping an input bit stream to a complex number domain;

a cyclic convolver and a transform unit ~~converter unit~~ coupled to the mapper ~~mapping unit~~ for generating a partial response signal, wherein a plurality of sub-symbols of the partial response signal is suppressed to produce a partial response truncated signal in a time domain; and

a prefix unit for appending a cyclic prefix for a leading edge of the partial response truncated signal, the partial response truncated signal to which the cyclic prefix is appended is used to modulate a carrier signal to generate the signal for communication upon the noisy channel.

Claim 12 (New): The apparatus of claim 11, wherein the cyclic convolver performs a cyclic convolution on the complex number domain to produce the partial response truncated signal.

Claim 13 (New): The apparatus of claim 11, wherein the cyclic convolver performs a cyclic convolution on the complex number domain employing a known polynomial vector.

Claim 14 (New): The apparatus of claim 11, wherein a portion of the plurality of sub-symbols of the partial response signal has near zero energy.

Claim 15 (New): The apparatus of claim 11, wherein a portion of the plurality of sub-symbols of the partial response signal has near zero amplitude.

Claim 16 (New): The apparatus ~~as recited in~~ of claim 11, further comprising a serial-to-parallel unit that converts the partial response truncated signal into a parallel format.

Claim 17 (New): The apparatus ~~as recited in~~ of claim 11, further comprising an inverse Fast Fourier transform unit that generates real and imaginary components in a time domain of the partial response truncated signal.

Claim 18 (New): The apparatus ~~as recited in~~ of claim 11, further comprising a parallel-to-serial unit that converts the partial response truncated signal into a serial format.

Claim 19 (New): The apparatus ~~as recited in~~ of claim 11, wherein the cyclic prefix is appended substantially free of interference with the partial response truncated signal.

Claim 20 (New): The apparatus ~~as recited in~~ of claim 11, wherein the noisy channel is subject to interference and fading.

Claim 21 (New): The apparatus ~~as recited in~~ of claim 11, wherein the apparatus employs a partial response orthogonal frequency division multiplexing signal modulation technique.